

REMARKS

Applicants claim the benefits of the priority of application U.S. Serial No. 09/303,986 filed 29 April 1999 (the '986 application), of which this application is a continuation. The specification has been amended to reflect the continuation in the newly-added section headed "Cross-Reference to Related Application." A copy of the original specification for the '986 application is filed herewith.

Original claims 1-103 have been allowed in the '986 application and are canceled herein. Independent Claim 104 and dependent claims 105-107, 112, 113, 115-122, and 124 are amended herein. Claim 127 is canceled, and independent Claims 128-130 are newly added. Independent Claim 104 as amended herein and new Claims 128-130 provide somewhat different definitions of Applicant's invention from allowed Claims 1-103.

None of the foregoing amendments expand the scope of the invention or adds new matter to the specification. Entry of the requested amendments and favorable consideration of the comments contained herein are requested.

In the '986 application:

1. original Claims 104, 106, 107, 109, 110, 116-120 and 126 were rejected under 35 U.S.C. §103(a) as being unpatentable over Coehorst (U.S. 4,006,796) in view of Sciarra (U.S. 4,539,440) or von Suchorzynski (U.S. 1,683,316);
2. original Claims 105, 111 and 121-125 were rejected under 35 U.S.C. §103(a) as being unpatentable over Coehorst in view of Sciarra or Von Suchorzynski and further in view of Fretz (U.S. 6,275,596); and
3. original Claims 108, 112-115 and 127 were rejected under 35 U.S.C. §103(a) as being unpatentable over Coehorst in view of Sciarra or von Suchorzynski and further in view of Brimhall (U.S. 6,359,993).

These rejections are respectfully traversed, but will be addressed in terms of the claims as herein amended. Applicant wishes to stress that the amendment of claims herein is

solely for the sake of clarification.

DISCUSSION OF AMENDMENTS TO THE CLAIMS

1. Independent main claim 104, as amended, recites, among other things, a radially flexible, substantially axially rigid sound conduction tube constructed and adapted for removable connection to a receiver section of a hearing device and for comfortable and consistent insertion into and removal from the ear canal, a first concentric seal projecting radially from the sound conduction tube to flexibly engage the wall of the bony part of the ear canal in a sealing manner and form a first confined space between the seal and the tympanic membrane when the tubular insert is worn in the ear canal; the seal having a relatively small pressure vent extending therethrough, and adapted to cooperate with a second concentric seal projecting radially from the sound conduction tube or the receiver section to flexibly engage the wall of the cartilaginous part of the ear canal in a sealing manner and form a second confined space between the seals, the second seal having a relatively large occlusion-relief vent extending therethrough, such that when the tubular insert is worn in the ear canal, the vents provide substantial acoustic sealing for sound delivered in the first space, while directing occlusion sounds away from the tympanic membrane.

Further amendments to the claims:

2. Claims 105-107, 114 and 122 are amended to refer to the sound conduction tube;
3. Claims 112, 113 and 115 are amended to recite the first concentric seal;
4. Claims 116-121 are amended to remove alternate "or" language;
5. Claim 118 is additionally amended to add an inadvertently-omitted comma;
6. Claim 127 is canceled, the limitation having been included in Claim 104; and
7. Independent Claims 128-130 are newly added.

REJECTION UNDER 35 U.S.C. §103(a)

In the Office Action mailed 6 August 2003, the Examiner rejected Claims 104, 106, 107, 109, 110, 116-120 and 126 under 35 U.S.C. §103(a) as being unpatentable over Coehorst (U.S. 4,006,796) in view of Sciarra (U.S. 4,539,440) or von Suchorzynski (U.S.

1,683,316). For the following reasons, the Examiner is in error and the rejections under §103(a) must be withdrawn.

For an obviousness rejection under §103(a) to be maintained, the prior art is compared to the invention as claimed. In order to make out a *prima facie* case of obviousness, one of the required elements is that the prior art reference or combination of references must teach or suggest all the limitations of the claims. *In re Wilson*, 424 F.2d 1382, 1385, 165, U.S.P.Q. 494, 496 (C.C.P.A. (1970), emphasis added. Furthermore, the teachings or suggestions, as well as the expectation of success, must come from the prior art, not Applicant's disclosure. *In re Vaeck*, 947, F.2d 488, 492, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). For the following reasons, the Examiner has not made out a *prima facie* case of obviousness, and the rejection of Claims 104, 106, 107, 109, 110, 116-120 and 126 must be withdrawn.

Coehorst is directed primarily towards an earpiece comprising a stiff acoustic conduction tube that is surrounded by a thin-walled flexible container containing a jelly-like paste. Coehorst neither teaches that the tube is radially flexible, nor that there are vents within the jelly-filled container, nor that different kinds of venting means are included to provide pressure- or occlusion-relief. See FIG. 1 of Coehorst. Thus, the present invention is distinct and non-obvious in light of Coehorst.

Sciarra is directed towards an expandable hearing aid with an insertion stop that lodges against the external ear at the entrance of the auditory canal. The hearing aid has a stretchable outer layer for extending the device radially within the ear canal. There is no separable sound tube, nor any mention of a tube adapted for removable connection to a hearing device. See FIG. 2 of Sciarra.

Von Suchorzynski is directed towards a sound diaphragm that has a spring-mounted membrane bag intended to bear against the tympanic membrane of an individual. Sound vibrations at the diaphragm are intended to travel along the spring windings to the eardrum. Von Suchorzynski neither discloses a sound tube nor makes any mention of venting.

For the foregoing reasons, the Examiner has not made out a *prima facie* case of obviousness in order to sustain the rejections of Claims 104, 106, 107, 109, 110, 116-120 and 126 under 35 U.S.C. §103(a) based on Coehorst in view of Sciarra or von Suchorzynski. Accordingly, this rejection must fail. Withdrawal of the rejections under §103(a) is urged, and further consideration of the specification and claims is requested.

SECOND REJECTION UNDER 35 U.S.C. §103(a)

On page 5 of the Office Action dated 6 August 2003, the Examiner rejected original Claims 105, 111 and 121-125 under 35 U.S.C. §103(a) as being unpatentable over Coehorst in view of Sciarra or Von Suchorzynski and further in view of Fretz (U.S. Pat. No. 6,275,596). For the following reasons, these rejections are improper and must be withdrawn.

Fretz teaches an ear canal tube sized for positioning in the ear canal of a user so that the ear canal is partially open for the direct receipt of ambient sounds. Fretz does not teach seals for flexibly engaging the wall of the bony part of the ear canal, nor pressure vents or occlusion-relief vents. These and the remaining features of Applicants' independent Claim 104 as herein amended are neither taught nor described in Coehorst, Sciarra, Von Suchorzynski or Fretz, either alone or in combination. Thus, none of the cited prior art, either alone or in combination teach or suggest all the limitations of Applicants' invention.

For the foregoing reasons, and in light of the discussions above, the rejection of Claims 105, 111 and 121-125 under 35 U.S.C. §103(a) based on Coehorst, Sciarra and Von Suchorzynski in view of Fretz must therefore be withdrawn. Withdrawal of the §103(a) rejection and further consideration of the specification and claims is therefore respectfully requested.

THIRD REJECTION UNDER 35 U.S.C. §103(a)

The Examiner rejected Claims 108, 112-115 and 127 under 35 U.S.C. §103(a) as being unpatentable over Coehorst in view of Sciarra or Von Suchorzynski in view of Brimhall (U.S. Pat. No. 6,359,993) on p.6 of the Official Action mailed 6 August 2003. Applicants point out that Claim 127 has been canceled herein, the limitation therein having been incorporated in dependent Claim 104 herein. In light of the amendments to Claim 104

and the further amendments to Claims 112, 113 and 115, the rejection by the Examiner is in error and must be withdrawn.

Brimhall is directed towards a hearing aid including a combination vent and retrieval cord, the device intended for situation close to the tympanic membrane of a user. However, the receiver and speaker unit in Brimhall are located at the distal end of the device, with the combination vent and retrieval cord running parallel thereto in the form of a conduit, along the length of the device. In fact, Brimhall indicates that the tubular body “is...formed from substantially *rigid* material and is physically *bonded* to the main module (col. 5, lines 22-25, emphasis added). By contrast, the tubular insert of Applicants’ invention extends medially *from* a hearing device situated laterally in the ear canal and includes a concentric seal projecting radially from the sound conduction tube. Furthermore, Applicants’ tubular insert is removably attached to the hearing device, unlike Brimhall’s bonded conduit.

Claim 127 having been canceled herein, the rejection of 127 is now moot. For the foregoing reasons, and in light of the discussions above, the Examiner has not made out a *prima facie* case for obviousness for Claims 108 and 112-115 under 35 U.S.C. §103(a) based on Coehorst, Sciarra or Von Suchorzynski in view of Brimhall. Accordingly, these rejections are in error and must be withdrawn. Applicants herein request withdrawal of the rejections of Claims 108 and 112-115 and respectfully urge further consideration of these and the remaining claims.

CONCLUSION

Claims 104-107, 112, 113, 115-122, 124 are amended herein, Claim 127 is canceled, and new Claims 128-130 are added. Once the foregoing amendments have been made, Claims 104-126 and 128-130 are pending in the application.

The Examiner’s rejections of the claims under 35 U.S.C. §103(a) based on Coehorst (U.S. 4,006,796) in view of Sciarra (U.S. 4,539,440) or von Suchorzynski (U.S. 1,683,316) and further in view of Fretz (U.S. 6,275,596) or Brimhall (U.S. 6,359,993) have been overcome. Withdrawal of the §103(a) rejections are therefore respectfully urged.

Claims 104-126 and 128-130 define novel and non-obvious subject matter of the present invention. Applicants respectfully request entry of the amendments and reconsideration of the Claims. If the next action is other than to allow the claims, the undersigned requests the favor of a brief telephonic interview.

Respectfully submitted,



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Dated: 24 February 2004

Enclosures